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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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10/797,564

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12/27/2005

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EXAMINER

COHEN, AMY R

ART UNIT

PAPER NUMBER

2859

DATE MAILED: 12/27/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

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| | | | |
|------------------------------|------------------------|---------------------|--|
| Office Action Summary | Application No. | Applicant(s) | |
| | 10/797,564 | ISHIBASHI ET AL. | |
| | Examiner | Art Unit | |
| | Amy R. Cohen | 2859 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 October 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-35 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-35 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11 October 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-35 are rejected under 35 U.S.C. 102(b) as being anticipated by Harumoto (US PG PUB 2002/0021909).

Regarding claims 1-13: Harumoto teaches an image formation device (1) that uses recording agents of multiple colors to form a color image on a medium like paper (Paragraph [0042]), said image formation device comprising: an image formation module (30) that holds multiple recording agent cartridges (5Y, 5M, 5C, 5K) respectively filled with the recording agents of the multiple colors in an attachable and detachable manner and moves said multiple recording agent cartridges to form corresponding color component images eventually to form a color image with supplies of the recording agents from said multiple recording agent cartridges (Paragraph [0042]); an information transmission module (92) that is located in a moving range of said multiple recording agent cartridges in the course of image formation by said image formation module (Fig. 2, Paragraphs [0064]-[0070]), wherein, while a certain one of said multiple recording agent cartridges is in an executable position of formation of a corresponding color component image by said image formation module, said information transmission module transmits information in a contactless, storable manner to a storage element mounted on another recording agent cartridge different from the certain recording agent cartridge (Fig. 2, Paragraphs

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[0064]-[0070]); and a control module (115) that controls said information transmission module to store image formation-relating information, which regards information of the color image by said image formation module, into each of said storage elements mounted on said multiple recording agent cartridges (Fig. 2, Paragraphs [0064]-[0070]).

Harumoto teaches the image formation device wherein said control module controls said information transmission module to store the image formation-relating information into each of said storage elements mounted on said multiple recording agent cartridges at a specific timing after completion of formation of the color image by said image formation module (Fig. 2, Paragraphs [0064]-[0070], [0077]).

Harumoto teaches the image formation device wherein said control module controls said information transmission module to store previous image formation-relating information, which regards formation of a previous color image, in the course of formation of the corresponding color component images by said image formation module (Fig. 2, Paragraphs [0064]-[0070], [0077]).

Harumoto teaches the image formation device wherein said control module controls said information transmission module to store the image formation-relating information into said storage element (91, 101) mounted on one of said multiple recording agent cartridges filled with a recording agent of each of the multiple colors at an end timing of formation of the corresponding color component image by said image formation module (Figs. 2, 9, Paragraphs [0064]-[0070], [0077]).

Harumoto teaches the image formation device wherein the image formation-relating information includes at least either a number of formed images with regard to each of the

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multiple colors and a consumption of the recording agent with regard to each of the multiple colors (Paragraph [0018]).

Harumoto teaches the image formation device wherein said multiple recording agent cartridges are filled with recording agents of four colors, that is, cyan, magenta, yellow, and black (paragraph 0042)).

Harumoto teaches the image formation device wherein said image formation module holds said multiple recording agent cartridges on a rotatable, quasi-cylindrical rotary holder unit to form the respective color component images (Figs. 1-5, 8, Paragraphs [0042], [0048]).

Harumoto teaches the image formation wherein each of said multiple recording agent cartridges is designed to have a substantially fan-shaped cross section and form a substantially circular cross section as a whole in the case of attachment of said multiple recording agent cartridges to the rotary holder unit (Fig. 3, Paragraphs [0042], [0048]).

Harumoto teaches the image formation device wherein said information transmission module is located in a neighborhood of an end of the rotary holder unit (Fig. 2, Paragraphs [0064]-[0070]).

Harumoto teaches the image formation device wherein said information transmission module is located to successively face said storage elements mounted on said multiple recording agent cartridges with rotation of the rotary holder unit (Fig. 2, Paragraphs [0064]-[0070]).

Harumoto teaches the image formation device wherein the recording agent is either toner or ink (Paragraph [0042]).

Harumoto teaches the image formation device wherein said storage element comprises: a memory unit that stores information (Paragraphs [0066]-[0077]); a receiver unit that receives

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electromagnetic wave in a predetermined frequency band (Paragraphs [0066]-[0077]); an information analyzer unit that analyzes information carried on the electromagnetic wave in the predetermined frequency band received by said receiver unit (Paragraphs [0066]-[0077]); and an information control unit that, when the analyzed information includes storage instruction information for storage of the image formation-relating information, controls said memory unit to store the image formation-relating information, which is sent on the electromagnetic wave in the predetermined frequency band and is analyzed by said information analyzer unit, and said information transmission module transmits the information carried on the electromagnetic wave in the predetermined frequency band (Paragraphs [0066]-[0077]).

Harumoto teaches the image formation device wherein said storage element further comprises a power supply unit (111) that utilizes energy of the electromagnetic wave in the predetermined frequency band received by said receiver unit to generate electric power required for the analysis of information by said information analyzer unit and for the storage of information by said information control unit (Paragraphs [0066]-[0077]).

Regarding claims 14-27: Harumoto teaches an image formation device (1) that uses a recording agent to form an image on a medium like paper (Paragraph [0042]), said image formation device comprising: an image formation module (30) that holds multiple recording agent cartridges (5Y, 5M, 5C, 5K) respectively filled with the recording agent in an attachable and detachable manner and moves said multiple recording agent cartridges to form an image on the medium with a supply of the recording agent from at least one recording agent cartridge among said multiple recording agent cartridges (Paragraph [0042]); an information transmission module (92) that is located in a moving range of said multiple recording agent cartridges (Fig. 2,

Paragraphs [0064]-[0070]), wherein, while a certain one of said multiple recording agent cartridges is in an executable position of formation of a corresponding color component image by said image formation module, said information transmission module transmits information in a contactless, storable manner to a storage element mounted on another recording agent cartridge different from the certain recording agent cartridge (Fig. 2, Paragraphs [0064]-[0070]); and a control module (115) that controls said information transmission module to store image formation-relating information, which regards information of the image by said image formation module, into each of said storage elements mounted on said multiple recording agent cartridges (Fig. 2, Paragraphs [0064]-[0070]).

Harumoto teaches the image formation device comprising a cartridge specification module (95) that specifies one recording agent cartridge among said multiple recording agent cartridges, wherein said image formation module forms the image with a supply of the recording agent cartridge specified by said cartridge specification module (Paragraph [0081]-[0088]).

Harumoto teaches the image formation device wherein said control module controls said information transmission module to store the image formation-relating information into each of said storage elements mounted on said multiple recording agent cartridges at a specific timing after completion of formation of the image by said image formation module (Fig. 2, Paragraphs [0064]-[0070], [0077]).

Harumoto teaches the image formation device wherein said control module controls said information transmission module to store previous image formation-relating information, which regards formation of a previous image, in the course of formation of the image by said image formation module (Fig. 2, Paragraphs [0064]-[0070], [0077]).

Harumoto teaches the image formation device wherein said control module controls said information transmission module to store the image formation-relating information into said storage element (91, 101) mounted on a recording agent cartridge used for image formation at an end timing of the image formation by said image formation module (Figs. 2, 9, Paragraphs [0064]-[0070], [0077]).

Harumoto teaches the image formation device wherein said control module controls said information transmission module to store the image formation-relating information into said storage element (91, 101) mounted on a specified recording agent cartridge, in response to a detachment instruction of said specified recording agent cartridge (Paragraphs [0018]-[0020]).

Harumoto teaches the image formation device wherein the image formation-relating information includes at least either a number of formed images and a consumption of the recording agent (Paragraph [0018]).

Harumoto teaches the image formation device wherein said image formation module holds said multiple recording agent cartridges on a rotatable, quasi-cylindrical rotary holder unit to form the respective color component images (Figs. 1-5, 8, Paragraphs [0042], [0048]).

Harumoto teaches the image formation wherein each of said multiple recording agent cartridges is designed to have a substantially fan-shaped cross section and form a substantially circular cross section as a whole in the case of attachment of said multiple recording agent cartridges to the rotary holder unit (Fig. 3, Paragraphs [0042], [0048]).

Harumoto teaches the image formation device wherein said information transmission module is located in a neighborhood of an end of the rotary holder unit (Fig. 2, Paragraphs [0064]-[0070]).

Harumoto teaches the image formation device wherein said information transmission module is located to successively face said storage elements mounted on said multiple recording agent cartridges with rotation of the rotary holder unit (Fig. 2, Paragraphs [0064]-[0070]).

Harumoto teaches the image formation device wherein the recording agent is either toner or ink (Paragraph [0042]).

Harumoto teaches the image formation device wherein said storage element comprises: a memory unit that stores information (Paragraphs [0066]-[0077]); a receiver unit that receives electromagnetic wave in a predetermined frequency band (Paragraphs [0066]-[0077]); an information analyzer unit that analyzes information carried on the electromagnetic wave in the predetermined frequency band received by said receiver unit (Paragraphs [0066]-[0077]); and an information control unit that, when the analyzed information includes storage instruction information for storage of the image formation-relating information, controls said memory unit to store the image formation-relating information, which is sent on the electromagnetic wave in the predetermined frequency band and is analyzed by said information analyzer unit, and said information transmission module transmits the information carried on the electromagnetic wave in the predetermined frequency band (Paragraphs [0066]-[0077]).

Harumoto teaches the image formation device wherein said storage element further comprises a power supply unit (111) that utilizes energy of the electromagnetic wave in the predetermined frequency band received by said receiver unit to generate electric power required for the analysis of information by said information analyzer unit and for the storage of information by said information control unit (Paragraphs [0066]-[0077]).

Regarding claims 28-31: Harumoto teaches a recording agent cartridge (5, 50) that is attached to an image formation device (Fig. 2) functioning to form a color image and is filled with a recording agent of one of multiple colors used for the formation of the color image (Paragraph [0042]), said recording agent cartridge comprising: a storage element (91) that utilizes energy of received electromagnetic wave in a predetermined frequency band to store information sent on the electromagnetic wave (Paragraphs [0066]-[0070]).

Harumoto teaches the recording agent cartridge, said recording agent cartridge being designed to have a substantially fan-shaped cross section and form a substantially circular cross section as a whole in the case of attachment of said multiple recording agent cartridges respectively filled with recording agents of the multiple colors to said image formation device (Fig. 3, Paragraphs [0042], [0048]).

Harumoto teaches the recording agent cartridges wherein said storage element comprises: a memory unit that stores information (Paragraphs [0066]-[0077]); a receiver unit that receives electromagnetic wave in a predetermined frequency band (Paragraphs [0066]-[0077]); an information analyzer unit that analyzes information carried on the electromagnetic wave in the predetermined frequency band received by said receiver unit (Paragraphs [0066]-[0077]); an information control unit that, when the analyzed information includes storage instruction information for storage of a specific piece of information, controls said memory unit to store the specific piece of information, which is sent on the electromagnetic wave in the predetermined frequency band and is analyzed by said information analyzer unit; and a power supply unit (111) that utilizes energy of the electromagnetic wave in the predetermined frequency band received by said receiver unit to generate electric power required for the analysis of information by said

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information analyzer unit and for storage of information by said information control unit (Paragraphs [0066]-[0077]).

Harumoto teaches the recording agent cartridge being filled with toner as the recording agent (Paragraph [0042]).

Regarding claims 32-35: Harumoto teaches a recording agent cartridge (5, 50) that is attached to an image formation device (Fig. 2) functioning to form an image and is filled with a recording agent used for formation of the image (Paragraph [0042]), said recording agent cartridge comprising: a storage element (91) that utilizes energy of received electromagnetic wave in a predetermined frequency band to store information sent on the electromagnetic wave (Paragraphs [0066]-[0070]).

Harumoto teaches the recording agent cartridge, said recording agent cartridge being designed to have a substantially fan-shaped cross section and form a substantially circular cross section as a whole in the case of attachment of a preset number of recording agent cartridges to said image formation device (Fig. 3, Paragraphs [0042], [0048]).

Harumoto teaches the recording agent cartridges wherein said storage element comprises: a memory unit that stores information (Paragraphs [0066]-[0077]); a receiver unit that receives electromagnetic wave in a predetermined frequency band (Paragraphs [0066]-[0077]); an information analyzer unit that analyzes information carried on the electromagnetic wave in the predetermined frequency band received by said receiver unit (Paragraphs [0066]-[0077]); an information control unit that, when the analyzed information includes storage instruction information for storage of a specific piece of information, controls said memory unit to store the specific piece of information, which is sent on the electromagnetic wave in the predetermined

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frequency band and is analyzed by said information analyzer unit; and a power supply unit (111) that utilizes energy of the electromagnetic wave in the predetermined frequency band received by said receiver unit to generate electric power required for the analysis of information by said information analyzer unit and for storage of information by said information control unit (Paragraphs [0066]-[0077]).

Harumoto teaches the recording agent cartridge being filled with toner as the recording agent (Paragraph [0042]).

3. Claims 28, 30-32, 34, 35 are rejected under 35 U.S.C. 102(b) as being anticipated by Okada et al. (US PGPUB 2002/0015597).

Regarding claims 28, 30, 31: Okada et al. teaches a recording agent cartridge (14) that is attached to an image formation device (Fig. 13) functioning to form a color image and is filled with a recording agent of one of multiple colors used for the formation of the color image, said recording agent cartridge comprising: a storage element (101) that utilizes energy of received electromagnetic wave in a predetermined frequency band to store information sent on the electromagnetic wave (Paragraphs [0026]-[0030], [0071]-[0074]).

Okada et al. teaches the recording agent cartridge wherein said storage element comprises: a memory unit (110) that stores information; a receiver unit (108) that receives the electromagnetic wave in the predetermined frequency band; an information analyzer unit (106, 107) that analyzes information carried on the electromagnetic wave in the predetermined frequency band received by said receiver unit; an information control unit that (106, 107), when the analyzed information includes storage instruction information for storage of a specific piece of information, controls said memory unit to store the specific piece of information, which is sent

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on the electromagnetic wave in the predetermined frequency band and is analyzed by said information analyzer unit; and a power supply unit (104) that utilizes energy of the electromagnetic wave in the predetermined frequency band received by said receiver unit to generate electric power required for the analysis of information by said information analyzer unit and for the storage of information by said information control unit (Paragraphs [0065]-[0069]).

Okada et al. teaches the recording agent cartridge wherein said recording agent cartridge being filled with toner as the recording agent (Paragraphs [0002]-[0003]).

Regarding claims 32, 34, 35: Okada et al. teaches a recording agent cartridge (14) that is attached to an image formation device (Fig. 13) functioning to form an image and is filled with a recording agent used for formation of the image, said recording agent cartridge comprising: a storage element (101) that utilizes energy of received electromagnetic wave in a predetermined frequency band to store information sent on the electromagnetic wave (Paragraphs [0026]-[0030], [0071]-[0074]).

Okada et al. teaches the recording agent cartridge wherein said storage element comprises: a memory unit (110) that stores information; a receiver unit (108) that receives the electromagnetic wave in the predetermined frequency band; an information analyzer unit (106, 107) that analyzes information carried on the electromagnetic wave in the predetermined frequency band received by said receiver unit; an information control unit that (106, 107), when the analyzed information includes storage instruction information for storage of a specific piece of information, controls said memory unit to store the specific piece of information, which is sent on the electromagnetic wave in the predetermined frequency band and is analyzed by said information analyzer unit; and a power supply unit (104) that utilizes energy of the

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electromagnetic wave in the predetermined frequency band received by said receiver unit to generate electric power required for the analysis of information by said information analyzer unit and for the storage of information by said information control unit (Paragraphs [0065]-[0069]).

Okada et al. teaches the recording agent cartridge wherein said recording agent cartridge being filled with toner as the recording agent (Paragraphs [0002]-[0003]).

Response to Arguments

4. Applicant's arguments with respect to claims 1-35 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The following applications and patents disclose image formation devices Yoshizuka et al. (US PG PUB 2005/0105921), Tsuruya et al. (US PG PUB 2003/0133719), Tsukida et al. (U. S. Patent No. 6,954,595), Iida et al. (U. S. Patent no. 6,807,380), Sugimura et al. (U. S. Patent No. 6,780,553), Okada et al. (U. S. Patent no. 6,665,501), Harumoto (U. S. Patent No. 6,490,422), and Inose (U. S. Patent No. 6,385,407).

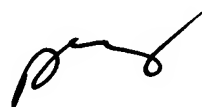
6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Amy R. Cohen whose telephone number is (571) 272-2238. The examiner can normally be reached on 8 am - 5 pm, M-F.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Diego F. Gutierrez can be reached on (571) 272-2245. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

ARC
December 22, 2005



Diego Gutierrez
Supervisory Examiner
Tech Center 2800